

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all prior versions, and listings, of claims in the Application.

Listing of Claims:

Claims 1-33 (Canceled).

Claim 34. (Currently amended) A method for operating a signal transmission device, the method comprising:

receiving a call via a communication network;

determining that the call is a packet voice call;

sending a ring signal to a voice telephony device;

detecting an off-hook condition of the voice telephony device; ~~and~~

establishing voice communication between the communication network and the voice telephony device ~~device~~;

wherein establishing voice communication comprises converting analog representations of voice signals to digital representations of voice signals, and converting digital representations of voice signals to analog representations of voice signals; and

wherein converting analog representations of voice signals to digital representations of voice signals comprises determining voice activity based upon voice signals from the voice telephony device, reducing the quantity of information transmitted

via the communication network, if voice activity is determined to be below a predetermined level, and refraining from reducing the quantity of information transmitted via the communication network, if voice activity is determined not to be below the predetermined level.

Claim 35. (Previously Presented) The method of claim 34 wherein the communication network is a conventional telephone switching network.

Claim 36. (Previously Presented) The method of claim 35 wherein the call is received using analog signaling.

Claim 37. (Previously Presented) The method of claim 34 wherein the voice packets are packetized according to an Internet protocol (IP).

Claim 38. (Previously Presented) The method of claim 37 wherein the Internet protocol (IP) is the transmission control protocol (TCP)/Internet protocol (IP).

Claim 39. (Previously Presented) The method of claim 34 wherein the voice telephony device is a conventional telephone.

Claim 40. (Previously Presented) The method of claim 34 wherein the voice telephony device resides on a packet network.

Claim 41. (Cancelled).

Claim 42. (Currently amended) The method of claim [[41]] 34 wherein the converting digital representations of voice signals to analog representations of voice signals comprises buffering the digital representations for a period of time in order to minimize gaps in the resulting analog representation caused by changes in a propagation delay.

Claims 43-66. (Cancelled).

Claim 67. (New) One or more circuits for a signal transmission device, the one or more circuits comprising:

at least one interface circuit for communicating over a network;

the at least one interface circuit communicatively coupled to a voice telephony device; and

at least one processor operably coupled to the interface circuitry, the at least one processor operating to, at least:

receive a call via the network;

determine that the call is a packet voice call;

send a ring signal to the voice telephony device; and

detect an off-hook condition of the voice telephony device; and

establish voice communication between the network and the voice telephony device by:

receiving digital representations of voice signals converted from analog representations of voice signals,

transmitting digital representations of voice signals for conversion to analog representations of voice signals,

determining voice activity based upon voice signals from the voice telephony device,

reducing the quantity of information transmitted via the network, if voice activity is determined to be below a predetermined level, and refraining from reducing the quantity of information transmitted via the network, if voice activity is determined not to be below the predetermined level.

Claim 68. (New) The one or more circuits of claim 67 wherein the network is a telephone switching network.

Claim 69. (New) The one or more circuits of claim 68 wherein the call is received using analog signaling.

Claim 70. (New) The one or more circuits of claim 67 wherein the voice packets are packetized according to an Internet protocol (IP).

Claim 71. (New) The one or more circuits of claim 70 wherein the Internet protocol (IP) is the transmission control protocol (TCP)/Internet protocol (IP).

Claim 72. (New) The one or more circuits of claim 67 wherein the voice telephony device is a telephone.

Claim 73. (New) The one or more circuits of claim 67 wherein the voice telephony device resides on a packet network.

Claim 74. (New) The one or more circuits of claim 67 wherein the converting digital representations of voice signals to analog representations of voice signals comprises buffering the digital representations for a period of time in order to minimize gaps in the resulting analog representation caused by changes in a propagation delay.

Claim 75. (New) A signal transmission device comprising:
interface circuitry for receiving a call via a network; and

at least one processor operable to, at least:

determine that the call is a packet voice call;

send a ring signal to a voice telephony device;

detect an off-hook condition of the voice telephony device;

establish voice communication between the network and the voice telephony device by receiving digital representations of voice signals converted from analog representations of voice signals, and transmitting digital representations of voice signals for conversion to analog representations of voice signals; and

wherein establishing voice communication comprises:

determining voice activity based upon voice signals from the voice telephony device;

reducing the quantity of information transmitted via the network, if voice activity is determined to be below a predetermined level; and

refraining from reducing the quantity of information transmitted via the network, if voice activity is determined not to be below the predetermined level.

Claim 76. (New) The system of claim 75 wherein the network is a telephone switching network.

Claim 77. (New) The system of claim 76 wherein the call is received using analog signaling.

Claim 78. (New) The system of claim 75 wherein the voice packets are packetized according to an Internet protocol (IP).

Claim 79. (New) The system of claim 78 wherein the Internet protocol (IP) is the transmission control protocol (TCP)/Internet protocol (IP).

Claim 80. (New) The system of claim 75 wherein the voice telephony device is a telephone.

Claim 81. (New) The system of claim 75 wherein the voice telephony device resides on a packet network.

Claim 82. (New) The system of claim 75 wherein the at least one processor operates to buffer the digital representations for a period of time in order to minimize gaps in the resulting analog representation caused by changes in a propagation delay.